

Powered by diversity and healthy soil, organic Iowa farm flourishes

In many respects, Ron and Maria Vakulskas Rosmann's "Farm Sweet Farm" is a typical lowa farm.

"We have corn and soybeans, cattle and hogs," says Mr. Rosmann. "We have our own cow herd of around 100 Red Angus cows and we have our own swine herd with 45-50 sows, and we also have egg layers. So there is always something being born."

But that's where the similarities with traditional operations end. A certified organic producer since 1994, the 700-acre farm near Harlan is home to a remarkable amount of diversity—above and below the ground.



The certified-organic pork produced on the farm is marketed directly to consumers.

"Last year we planted 26 different species of seeds, and this is typical," Mr. Rosmann says. "There are seven varieties of corn, four varieties of soybeans, two varieties of oats, barley, wheat, spring wheat, cereal rye, popcorn. On the pasture and hay side we plant alfalfa and clovers and lot of different grasses."



profiles in soil health

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Farm Sweet Farm is also home to headlands, buffer strips, trees, shrubs, and shelter belts, all of which provide habitat for some 40 different species of birds that Mr. Rosmann says he can count on any given day.

"I think wildlife is an indicator of soil health and ecological health, and it's important for me to see birds. Because when I see birds, then I know that we are doing things right," he says. "With wildlife and insects we have predator species, predator-prey relationships, and it's sort of a balance. You don't get that balance in a mono-crop kind of agriculture. I just don't see the numbers of species on those kinds of farms."

Adding even more to the mix, the Rosmann's are expanding into multi-species cover crops.

So why all the diversity?

"I always feel like diversity equals stability and resiliency," Mr. Rosmann says. "We don't put our eggs in one basket. We work hard all the time but we are never overwhelmed. Now with possible climate change and our changing weather, it is really important to withstand the fluctuations of weather," he says.

Mr. Rosmann points to the fact that from June through August of 2014, his farm received 25 inches of rain. "Yet we have been able to harvest 120 acres of hay, we are on our third cutting now. There are always windows of opportunity, but it takes a lot of management and you have to be on your toes."

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> - Ron Vakulskas Rosmann, landowner



In addition to 26 different species of cash crop seeds planted on the farm, multi-species cover crops are used to help build soil health.

Soil health challenges in an organic system

Because organic producers cannot use pesticides, tilling the soil is often the weed-control tool of choice. However, tillage can disrupt and harm the soil biology.

Mr. Rosmann admits there are many challenges in organic cropping systems especially in trying to apply soil health principles like limiting soil disturbance. "Controlling weeds continues to be our biggest challenge," he says.

While not completely no-till, the Rosmanns try to limit tillage operations by using rotary hoeing, which creates little soil disturbance. "It is used entirely for weed control not for any form of tillage," Mr. Rosmann says." We do cultivate twice which is going to disturb the soil of course but the crop residue that is on top or near the surface helps to hold any soil from moving. By second cultivation, the crops are bigger and since the ridges are being made, you end up with mini terraces that are on the contour to help prevent soil loss as well."



Farm Sweet Farm is a 700-acre, certified-organic farm near Harlan, lowa and is home to a remarkable amount of diversity—above and below the ground.

And he's pleased with the results of his minimum tillage methods. "We have about 5-7 times fewer weeds in our ridge till plots versus conventional tillage so that has made believers out of us. And we are also experimenting some with complete no till organic," he says. "I would like to move more into that system. There is not a perfect system out there, but... we are continually trying to find that more perfect system."

Even with a remarkable level of conservation already applied to their farm, the Rosmanns continue to work with USDA's Natural Resources Conservation Service. Through the Environmental Quality Incentives Program, they've installed wildlife habitat, native prairie, and implemented a manure management plan. And because of the high level of conservation stewardship implemented on the farm, the Rosmanns qualified for Conservation Stewardship Program, and are re-enrolling this year, adding enhanced conservation practices.

His father passed away in 1980, three years before the use of all pesticides ended, but Mr. Rosmann says he knows he'd be proud of Farm Sweet Farm—as are the Rosmanns and their customers. "We are proud of the healthy food that we sell for other people eat," he says. "The thing that we are the most proud of is when you hear, 'Oh man, your popcorn is the best we have ever had,' or 'Your meat, man, I never tasted meat like that before.""

Mr. Rosmann says he and his family also feel good about knowing there are no antibiotics, hormones or pesticides in the foods they produce. "I think we can do our part to feed the world with our kind of system," he says. "It takes a lot of management and thinking and creativity, but that is what makes me love it the most. It's always interesting, always a challenge."

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